

Figure 1A

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                                helix A                helix B
                                ~~~~~~                ~~~~~~
HIV-1'O'  1 PVVPNAQGQMIHQALSPRTLNAWVKAVEEKAFNPEIIPMFMAELSEGAIPY 50
          |:| | | | |:| |:| | | | | | | | | | | | | | | | | | | |
HIV-1'M'  1 PIVQNIQGQMVHQAI SPRTLNAWVKVVEEKAFSPEVIPMFSALSEGATPQ 50
          M1/O1 pept.
          |-----| M2/O2 pept.
          |-----| M3/O3 pept.
          |-----|

                                helix C                helix D
                                ~~~~~~                ~~~~~~
HIV-1'O'  51 DINIMLNAIGGHQGALQVLKEVINEEAADWDRSHPPVVGPLPFGQIREPT 100
          |:| | | | |:| |:| | | | | | | | | | | | | | | |
HIV-1'M'  51 DLNTMLNTVGGHQAA MQMLKETINEEAAEWDRVHPVHAGPIAPGQMREPR 100
          -----| M4/O4 pept.
          |-----| M5/O5 pept.
          |-----|

                                helix E                helix F                helix G
                                ~~~~~~                ~~~~~~                ~~~~~~
HIV-1'O'  101 GSADIAGTTSTQQEQVHWITRANHVPVPVGDIIYRKWIVLGLNKMVKMYSPVS 150
          | | | | | | | | | | | | | | | | | | | | | | | |
HIV-1'M'  101 GSADIAGTTSTLQEQIGWMTN.NPPIPVGEIYKRWII LGLNKIVRMYSPTS 149
          --| M6/O6 pept.
          -----|
          M7/O7 pept.
          |-----| M8/O8 pept.
          |-----|

                                helix H                helix I                helix J
                                ~~~~~~                ~~~~~~                ~~~~~~
HIV-1'O'  151 ILDIKQGPKPEFRDYVDRFYKTLRAEQAIQDVKNWMTETLLVQNANPDCK 200
          | | | | | | | | | | | | | | | | | | | | | | | |
HIV-1'M'  150 ILDIRQGPKPEFRDYVDRFYKTLRAEQASQEVKNWMTETLLVQNANPDCK 199
          ***** (MHR)
          M9/O9 pept.
          -----|
          M10/O10 pept.
          |-----| M11/O11 pept.
          |-----|

                                J                helix K
                                ~~~~~~                ~~~~~~
HIV-1'O'  201 QILKALGPGATLEEMMVACQGVGGPETHKAKLL 232
          | | | | | | | | | | | | | | | | | | | | | |
HIV-1'M'  200 TILKALGPAATLEEMMTACQGVGGPGHKARVL 231
          M12/O12 pept.
          -----| M13/O13 pept.
          |-----|

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[illegible]

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                                helix A                      helix B
                                ~~~~~                      ~~~~~
HIV-1'O'      1 PVVPNAQGQMIHQALSPRTLNAWVKAVEEKAFNPEIIPMFMALESEGAIPY 50
| : | | | : | | : | | : | | : | | : | | : | | : | | : | | : | |
HIV-1'M'      1 PIVQNIQGQMVMVHQAI SPRTLNAWVKVVEEKA FSP E V I P M F S A L S E G A T P Q 50
| | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
HIV-2'A'      1 P.VQQAGGNYIHVPLSPRTLNAWVKLVEEKKFGAEVVPGFQALSEGCTPY 49


                                helix C                      helix D
                                ~~~~~                      ~~~~~
HIV-1'O'      51 DINIMLNAIGGGHQAALQVLKEVINEEAADWDRSHPPVVVGPLPPGQIREPT 100
| : | | | : | | : | | : | | : | | : | | : | | : | | : | | : | |
HIV-1'M'      51 DLNTMLNTVGGHQAAMQMLKETINEEA EWDRVHPVHAGPIAPGQMREPR 100
| : | | | : | | : | | : | | : | | : | | : | | : | | : | | : | |
HIV-2'A'      50 DINQLNCVGDHQAAMQII REI INEEAA DWDAQHP IP.GPLPAGQLRDP R 98

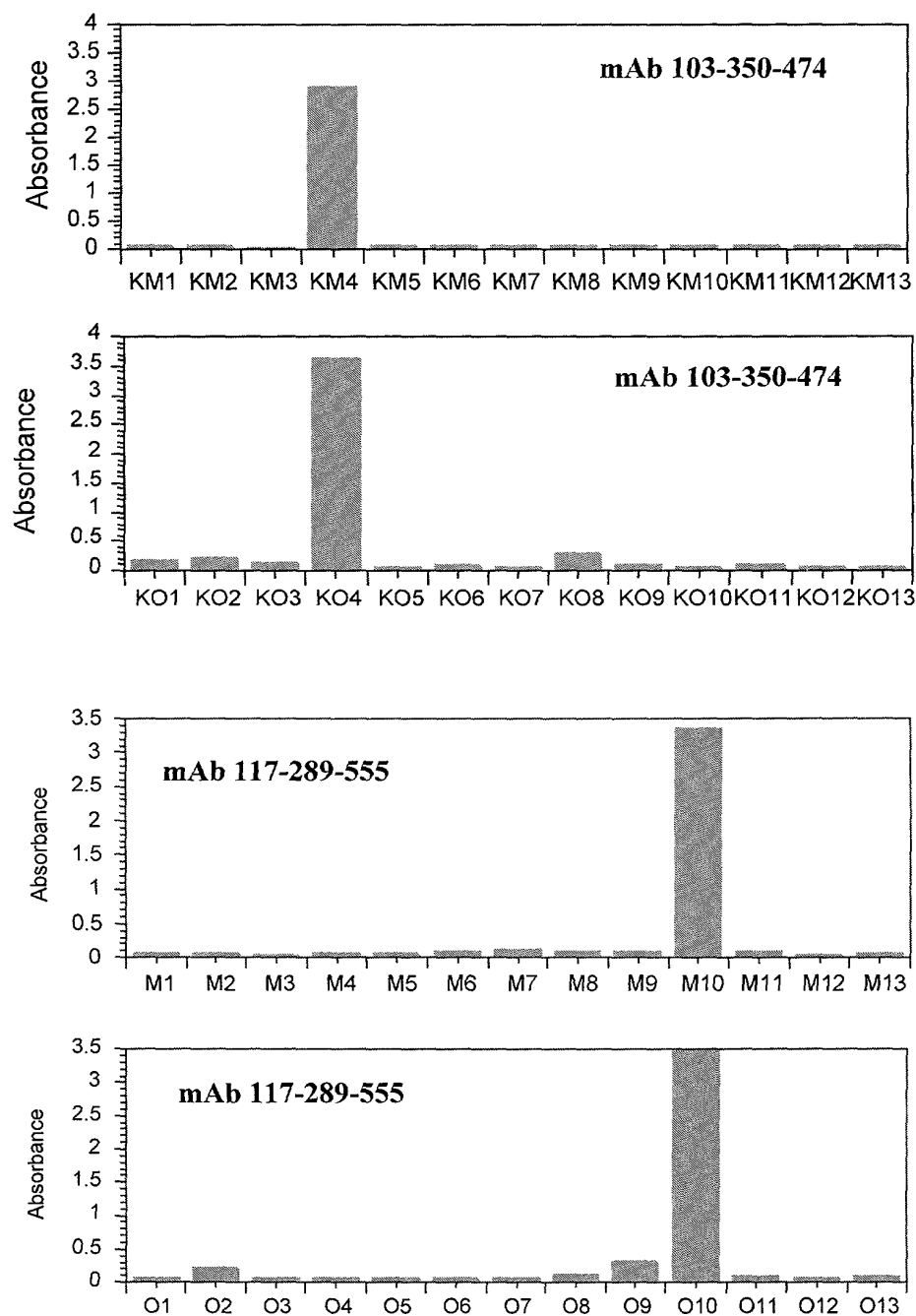

                                helix E                      helix F                      helix G
                                ~~~~~                      ~~~~~                      ~~~~~
HIV-1'O'      101 GS DIAGTTSTQEQVHWITRANHVPVPGDIYRKWIVLGLNKMVKMYSPVS 150
| | | | | : | . | | | : | : | : | : | | | | | : | | | | |
HIV-1'M'      101 GS DIAGTTSTLQEQIGWMTN.NPPIPVG EIYKRWIILGLNKIVRMYSPTS 149
| | | | | : | . | | | : | : | : | : | | | | | : | | | | |
HIV-2'A'      99 GS DIAGTTSTVDEQIQWMYRQP NPVPVGN IYRRW IQIGLKCV RMYNP TN 148


                                helix H                      helix I                      helix J
                                ~~~~~                      ~~~~~                      ~~~~~
***** (MHR)
HIV-1'O'      151 ILDIKQGPKEPF RDYVD RFYKTLRAEQAIQDVKNWMTETLLVQNANPDCK 200
| | | | | : | | | | | : | | | | | : | | | | | : | | | | |
HIV-1'M'      150 ILDIRQGPKEPF RDYVD RFYKTLRAEQASQEVKNWMTETLLVQNANPDCK 199
| | | | | : | . | | | : | | | | | : | | | | | : | | | | |
HIV-2'A'      149 IL DVKG GPKE SFQS YVD RFYKSLRAEQTDPAVKNWMTQTLLIQNANPDCK 198


                                J                      helix K
                                ~~~~~                      ~~~~~
HIV-1'O'      201 QILKALGPGATLEEMMVACQGVGGPTHKAKLL 232
| | | | | | | | | | | | | | | | | : |
HIV-1'M'      200 TILKALGPAATLEEMMTACQGVGGPGHKARVL 231
| : | | | | | | | | | | | : | : |
HIV-2'A'      199 LV LKGLGMNPTLEEMLTACQGVGGPSQKARLM 230

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**Figure 2A. Monoclonal antibodies 103-350-474 and 117-289-555 binding to p24 peptides**



**Figure 2B. Monoclonal antibodies 115-303-620, 120A-270-108 and 115B-151-423 binding to p24 peptides**

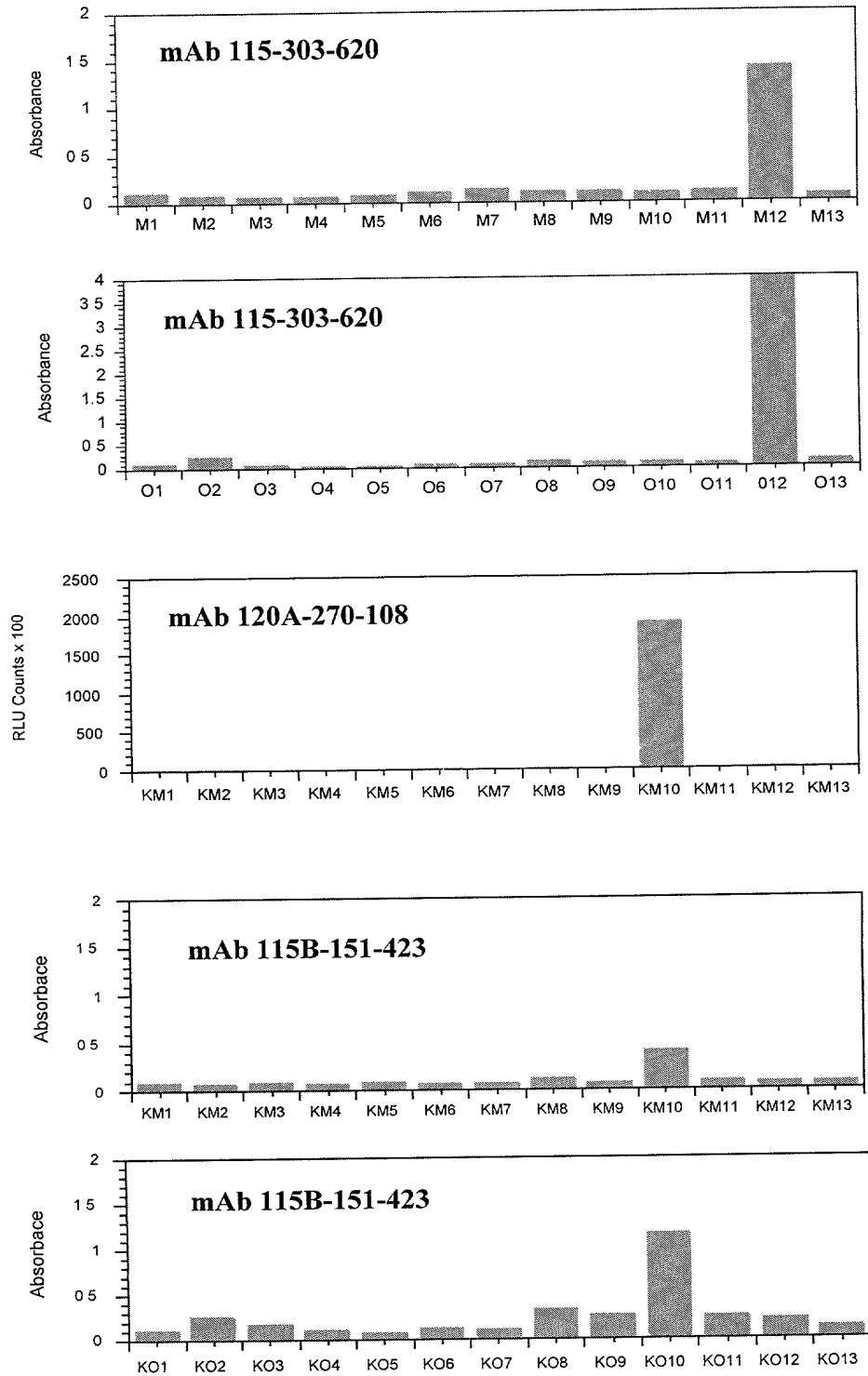
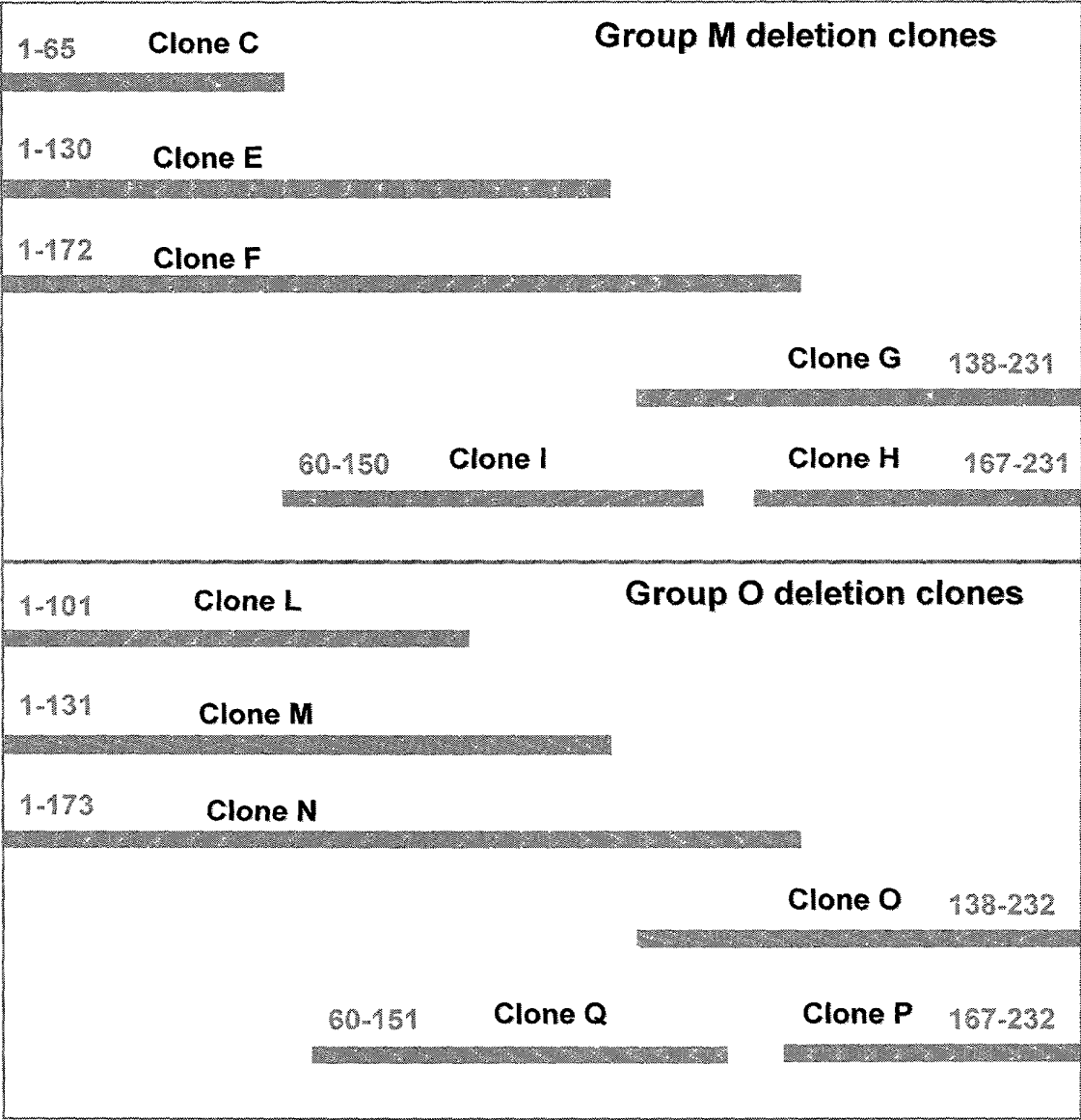
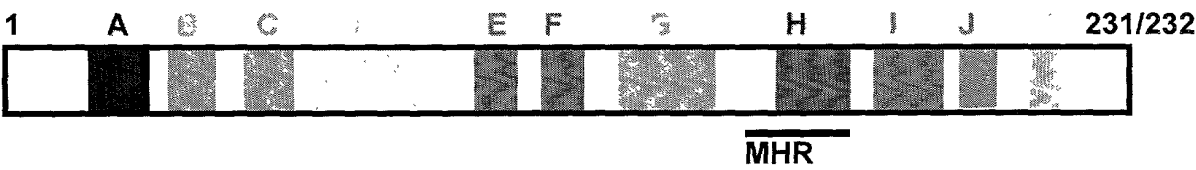


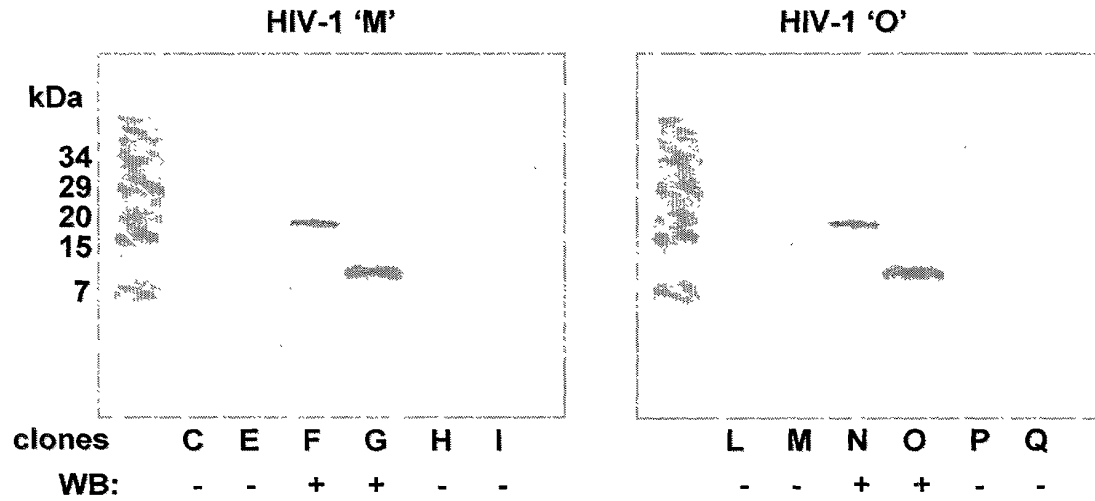
Figure 3 Location of deletion clones derived from HIV-1 group M and O p24



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**Figure 4 Western blots of mAbs against p24 deletion clones**

**Western blot of mAb 115B-151-423 against deletion**



**Western blot of mAb 108-394-470 against deletion**

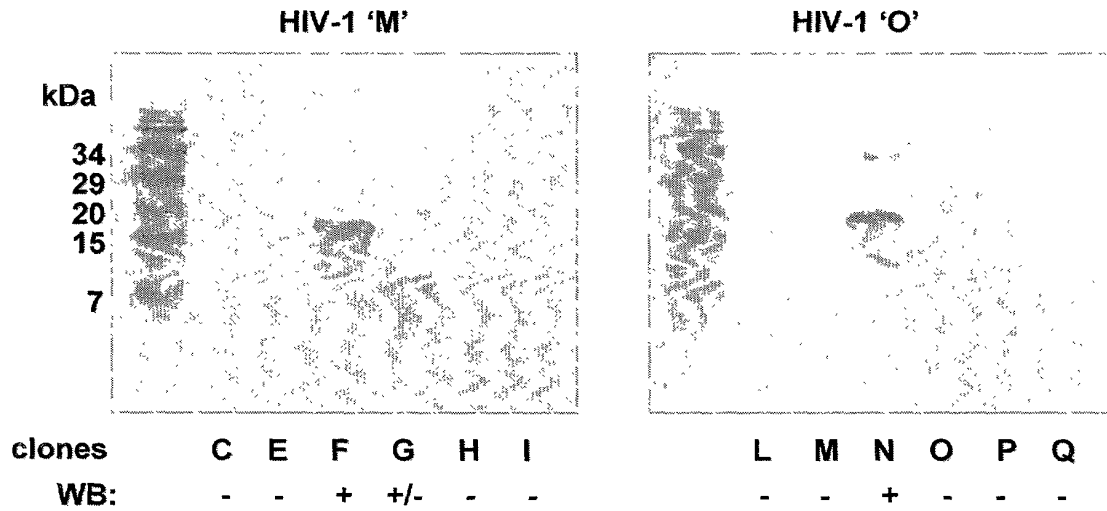
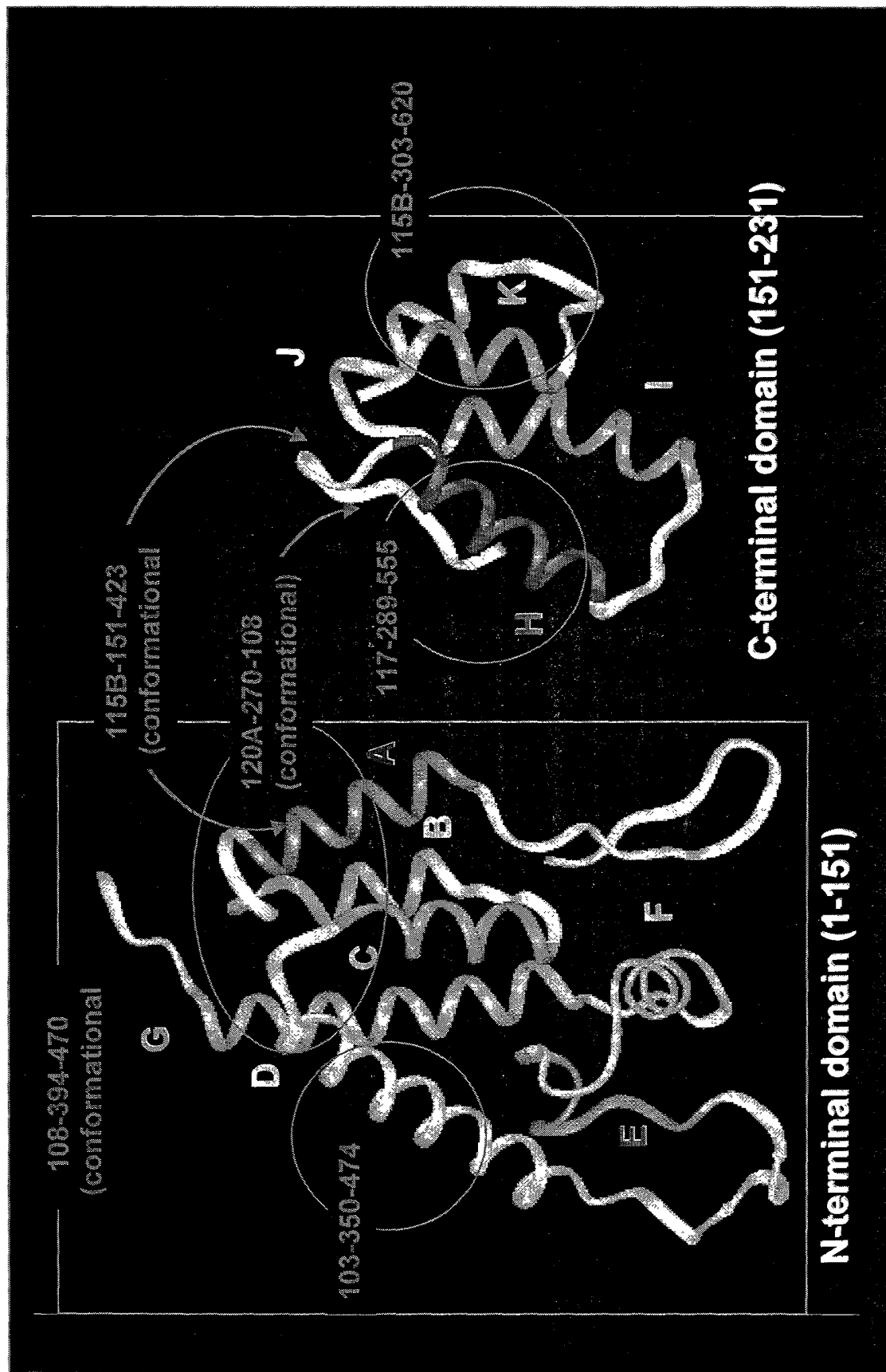
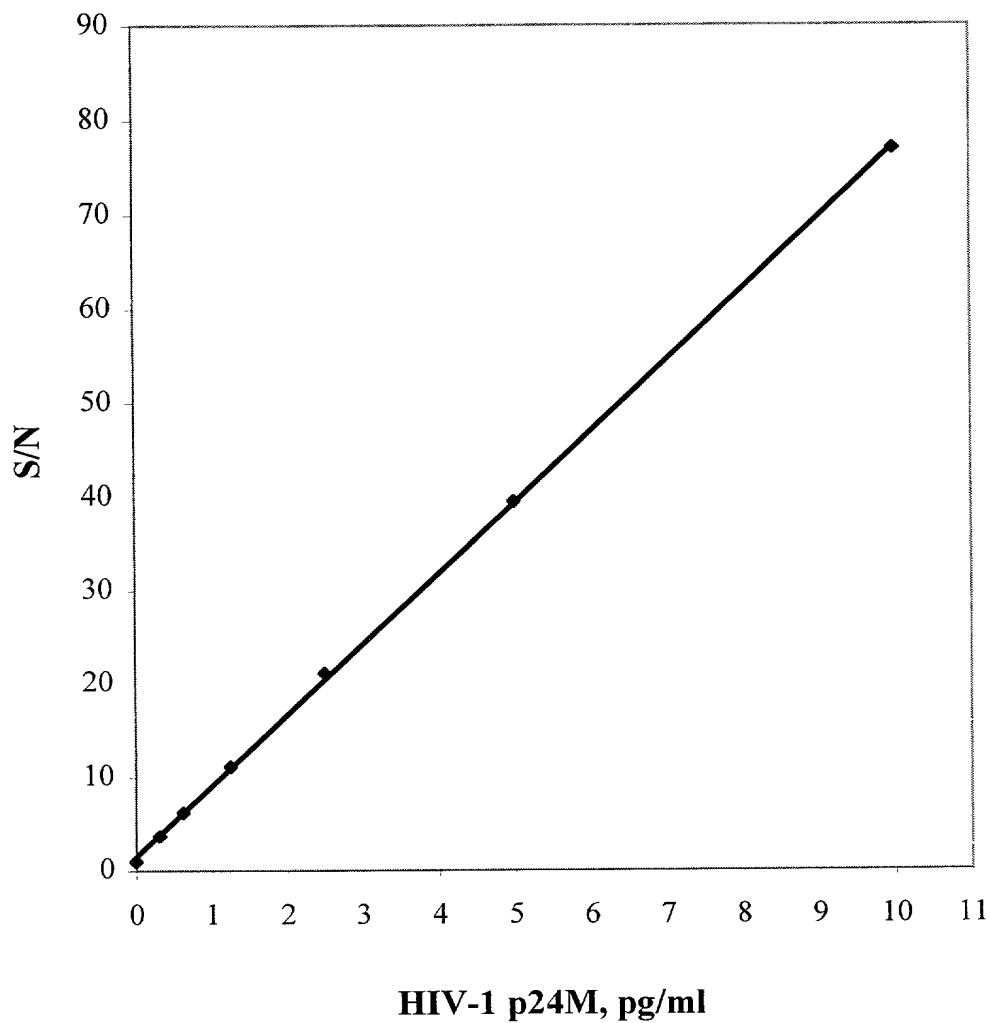


Figure 5 HIV-1 p24 epitopes recognized by p24 Mabs



**Figure 6.**

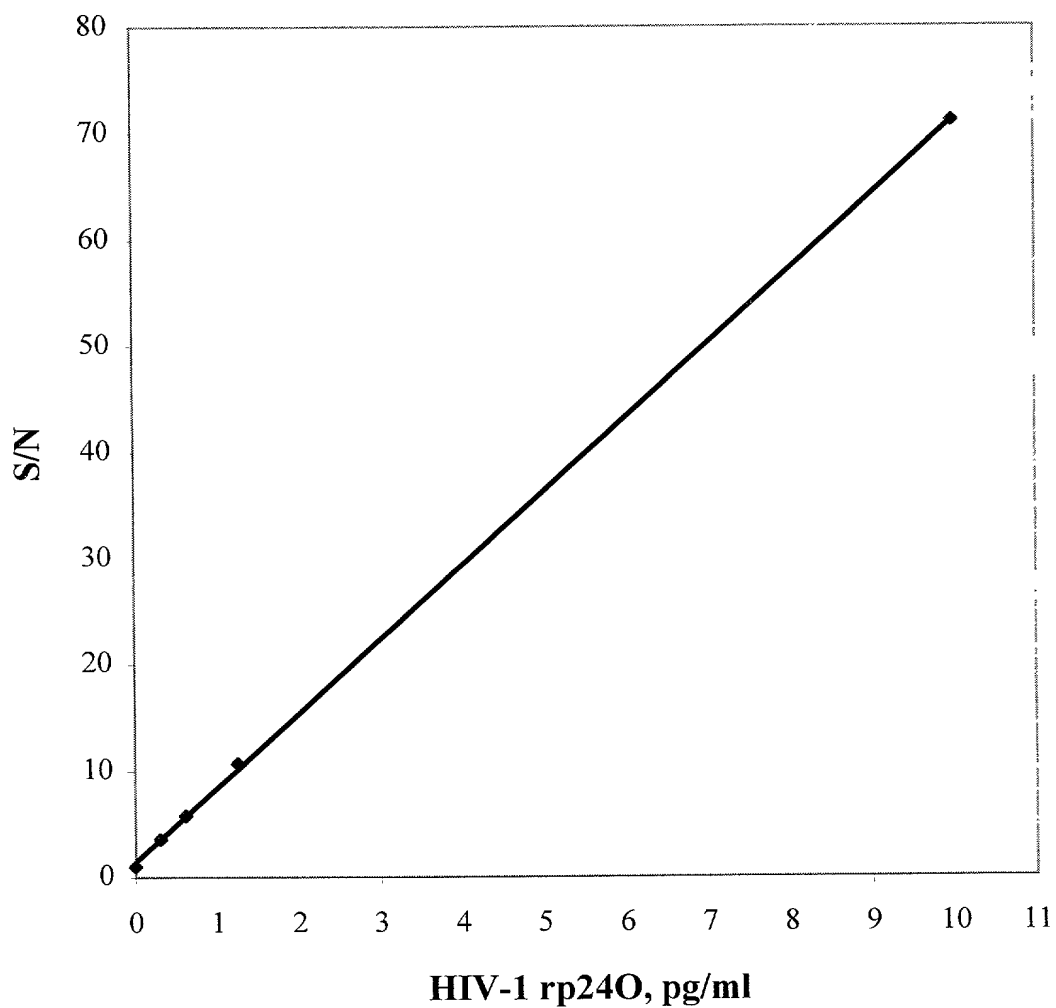
**HIV-1 p24M detection by 120A-270-108-uParticle and  
115B-151-423-ACR on Prism Standalone instrument**





**Figure 7.**

**HIV-1 rp24O detection by 120A-270-108-uParticle and 115B-151-423-ACR on Prism Standalone instrument**



**Figure 8.**  
**HIV-2 rp26 detection by 120A-270-108-uParticle and**  
**115B-151-423-ACR on Prism Standalone instrument**

